May 7, 2001

John Holt
Desert Southwest Regional Office
WAPA
P.O. Box 6457
Phoenix, AZ
85005-6457
FAX 602-352-2630

Re: Sundance Energy Project Transmission Line Siting
Support of "Alternative 3"

Dear Mr. Holt,

As a local property owner in Pinal County, I support "Alternative 3" as the correct alternative for placement of transmission lines to serve the Sundance Energy Project.

Sincerely,

David Daley

01/22 **Comment No. 01** **Issue Code: 22**
The commentor's preference has been noted.

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Phoenix, AZ
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May 1, 2001

John Holt, Environmental Manager
Western Area Power Administration
Desert Southwest Region
P.O. Box 6457
Phoenix, AZ 85005-6457

Re: Comments on Draft Environmental Impact Statement for Sundance Energy Project DOE/EIS - 0322

Dear Mr. Holt:

Don't Waste Arizona, Inc. (DWA) is a non-profit environmental organization dedicated to the protection and preservation of the Arizona environment. DWA is especially concerned about environmental justice, air pollution, and toxics issues. DWA is headquartered at 6205 South 12th Street, Phoenix, AZ 85040, and may be reached at (602) 268-6110.

On behalf of itself and its affected members, Don't Waste Arizona, Inc. (DWA) provides the following comments on the (in)adequacy of the Draft Environmental Impact Statement for the Sundance Energy Project DOE/EIS - 0322 (hereafter, the DEIS):

The first observation is that this DEIS is overwhelmingly rife with inconsistencies and contradictions. The DEIS also does not properly examine and analyze the impacts and the alternatives. The DEIS ignores a host of federal requirements in the field of environmental regulation. The DEIS appears to have been written deliberately to not examine or analyze properly the negative impacts of the proposed action, as it fails to really examine the environmental injustices and impacts the proposed facility will create, the adverse health impacts caused by the project, and other quantifiable adverse impacts caused by the facility's operation, such as noise. The DEIS, instead of actually examining the impacts and conducting the analysis of the impacts and an examination of the alternatives, gives many issues "honorable mention." That is, the DEIS attempts to merely mention issues and then dismiss them as "insignificant" without any scientific or logical explanation of the characterizations made about the significance of these issues, or even the proper discussion or analyses required by NEPA.. Mere mention of an issue or impact is not sufficient alone to serve as the analysis and exploration of alternatives that are at the heart of, and statutorily required by, NEPA. 01/25

AIR QUALITY AND HEALTH ISSUES 02/19

The DEIS also does not examine any alternatives to the Sundance facility's proposed simple cycle natural gas electrical power generation. And it does not examine the air pollution control technologies available or that will actually be used. It also does not provide any credible analysis of the impacts caused by a Title V, major source of air pollution being put into the environment of the area. The DEIS admits the facility's impacts on air pollution has triggered the Prevention of Significant Deterioration (PSD) 01/25 (cont.) 03/25 04/03 05/03

Comment No. 01 **Issue Code: 25**

The commentor's opposition to the project, and therefore, the EIS is noted. The commentor's overall judgement of the DEIS is based on the sum of his individual comments that are detailed below. Those individual comments which include examination of alternatives, NEPA and Federal requirements, inconsistencies and contradictions are addressed individually.

Part of the commentor's general and detailed comments stem from the DEIS not describing or evaluating the impacts from new air quality control system. The new air quality control system was mandated by the Pinal County Air Quality Control District after the DEIS was printed and distributed. The evaluation of the new system is included in the amended Section 4.2 of the FEIS.

Comment No. 02 **Issue Code: 19**

The DEIS does examine the negative impacts of the proposed action except those associated with the new air quality control system. These impacts are described in the amended Section 4.2 in the FEIS. See response to Comment No. 01 above. See also responses to Comment Nos. 23, 24, 26, and 27 below for discussion of noise and Comment Nos. 29 and 39 for discussion of environmental justice impacts.

Comment No. 03 **Issue Code: 25**

Sundance Energy LLC (Sundance) has applied to the Western Area Power Administration (Western) for an interconnection to Western's transmission lines in the vicinity of Coolidge, Arizona in Pinal County, southwest of Phoenix. The Federal decision is whether to enter into an interconnection and construction agreement with Sundance for the requested interconnection. The only alternatives to this Federal decision is not to allow the interconnection or to allow a different interconnection (different routing).

analysis requirements, with quantifiable impacts 50 km away from the power plant's site, then cavalierly shrugs off these impacts as "insignificant." This alone is disingenuous. Of the thousands of facilities in America that must get air pollution permits, a tiny fraction trigger these PSD requirements, so it must be admitted that a facility required to conduct a PSD analysis is a "significant impact" on that basis alone. Outrageously, on page 2-41, the DEIS purports that there will be "Minimal impacts" [to air quality] due to the construction and operation of the proposed Facility." DWA disputes this assertion. 05/03 (cont.)

The DEIS does not adequately examine the alternative control technologies for the Sundance facility. Long after the work on the DEIS was largely completed, the Pinal County agency that will ultimately issue the air pollution permit notified Sundance that it would require Sundance to utilize a control technology, Selective Catalytic Reduction (SCR). 06/03

SCR entails injecting ammonia into the exhaust across a catalyst bed, causing a reduction reaction that greatly eliminates (controls) NOx. With SCR, NOx can be reduced tenfold from previously achievable levels, to about 2.5 ppm per unit fuel. The agencies that issue air permits are myopic about reducing "criteria pollutants" (CO, VOCs, NOx, SOx, PM10) and ignore other impacts in their considerations. The "risk" from NOx emissions may be traded for the risks from ammonium sulfate, and the public may be getting more risk from the ammonium sulfate. 07/08

The SCR technology requires excess ammonia be injected into the exhaust stream so that there will be enough to react, but the excess ammonia combines with sulfates in the air above these power plants to form tiny particles (PM10) of ammonium sulfate. In fact, a significant proportion of all of the PM10 that power plants are projected to emit will be these ammonium salts. **Ammonium sulfate** specifically causes shortness of breath, coughing, and respiratory irritation/inflammation. PM10 (particulate matter 10 microns or less in size) is so small that your lungs are not able to filter them out. PM10 already is the air pollutant that shortens lives (respiratory and cardiac problems) and creates asthma and other respiratory ailments. Now with the effect of the ammonium sulfate, the PM10 will be even more of a problem, perhaps exponentially worse. Each power plant will put out 20-35 tons per years of the ammonium sulfate PM10, and another 80-100 tons per year of "regular PM10," so it is easy to see there will be a cumulative and adverse effect.

Because under the Clean Air Act, all PM10 is assumed to be created equal and assumed to be as harmful as mere dust, the regulatory agencies that issue air permits ignore the known extra and specific chemical hazards associated with some of this particulate matter. This unscientific approach will have especially dangerous and perhaps lethal consequences in areas where power plants using SCR technology operate and proliferate. There is actually reason to believe that it will sicken many and even kill some people. Power plants putting as much as 100 tons of a respiratory irritant into the air, along with hundreds of tons of other particulate matter, will obviously have an adverse impact on people's health.

There are already studies showing that of all the criteria pollutants, PM10 is the pollutant that causes the illnesses and deaths. A December 14, 2000, study titled, "Fine Particulate

Comment No. 03 (cont.) **Issue Code: 25**

The decisions associated with siting, design, construction, and operation of the proposed Facility are not Federal decisions. These decisions are regulated, approved, and overseen by the State of Arizona. Therefore, different sites, designs, and operational factors are not alternatives to the Federal decision. However, the impacts resulting from these decisions are interconnected with the decision to allow interconnection. If no interconnection was allowed, the proposed power plant would not be built regardless of design. Therefore, the potential impacts from the siting, design, construction and operation of the proposed plant are connected to the Federal interconnection decision. This EIS examines the impacts of the interconnected actions, even those actions that are not Federal decisions.

Comment No. 04 **Issue Code: 03**

The decision as to which air pollution control technology to implement at the proposed Facility is up to the Sundance and the appropriate state and/or local regulatory agencies. It is not a Western's decision. However, the impacts associated with the outcome of that decision are discussed in this EIS. It is the charter of the air quality regulatory agency to analyze the applicant's permit requests, and regulate the manner in which a project may operate with respect to air quality laws and regulations.

In conjunction with the Sundance Energy DEIS, a PSD air permit application was submitted to the Pinal County Air Quality Control District (PCAQCD), the regulatory agency charged with administering air quality laws and regulations in Pinal County. As part of the PSD application, an analysis of control technologies was presented and evaluated. A draft permit and associated Technical Support Document were issued for public review April 27, 2001. These public documents may be examined by contacting the PCAQCD.

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Air Pollution and Mortality in 20 U.S. Cities, 1987-1994," published in the *New England Journal of Medicine*, concluded, "There is consistent evidence that the levels of fine particulate matter in the air are associated with the risk of death from all causes and from cardiovascular and respiratory illnesses. These findings strengthen the rationale for controlling the levels of respirable particles in outdoor air."

And there are other studies that finger sulfates specifically as causing increased mortality. A study titled, "Particulate air pollution as a predictor of mortality in a prospective study of U.S. adults, published in March 1995 in the *American Journal of Respiratory and Critical Care Medicine*, states, "Increased mortality is associated with sulfate and fine particulate air pollution levels commonly found in U.S. cities." A German study, "Environmental air pollution and lung disease in children, states" Sulphates will increase the use of medication and decrease lung function in asthmatic children."

The DEIS is particularly unscientific in this regards. Table 3-2, on page 3-7, shows the 24-hour maximum ambient air concentration of PM10 in Coolidge as 83.6 ug/m3, with the NAAQS Standard at 150 ug/m3. It shows the annual ambient air concentration of PM10 in Coolidge as 39.6 ug/m3, with the NAAQS Standard as 50 ug/m3. This is without the additional burden of the PM10 from the proposed Sundance facility. The additional PM10 from Sundance, which will emit so much PM10 that it requires a PSD analysis, will undoubtedly move the ambient air concentrations of PM10 upwards, and closer to the limits of the NAAQS Standard. There obviously will be an impact on health and mortality in the area near Sundance as the power plants emissions of PM10 are added onto the burden that is already there. The DEIS never deals with this obvious information. The impacts of the additional PM10 must be fully analyzed and addressed. Again DWA references the December 14, 2000, study titled, "Fine Particulate Air Pollution and Mortality in 20 U.S. Cities, 1987-1994," published in the *New England Journal of Medicine*. In this study, the investigators used a single analytic approach to examine the association between PM10 concentrations in a given 24-hour period and the numbers of deaths reported on the following day in 20 of the largest cities and metropolitan areas in the United States, including Phoenix. The study found an average increase in the rate of death from all causes of about 0.5 percent for every increase in the PM10 concentration of 10 micrograms per cubic meter. The PM10 concentrations were positively associated with daily mortality rates in most of the 20 cities studied and at concentrations well below the current 24-hour standard of 150 micrograms per cubic meter. In fact, the 90th percentile of the distribution of daily values was below the 24-hour standard in each of the 20 cities. Moreover, the association was specific to PM10. The finding of a strong association between the PM10 concentration and the rate of death from cardiovascular and respiratory causes offers support for the idea that the concentrations of particulate air pollution influence mortality.

08/03

After reviewing the science, anyone who would claim that the Sundance Energy facility would create minimal impacts is totally irresponsible. It is also with complete scientific basis to say that more asthma and other respiratory diseases will be caused or aggravated by this major pollution source. Of course, this kind of bogus DEIS and bogus NEPA process is to be expected when agencies are not objective and merely go through the motions of an essentially counterfeit NEPA process in order to serve their corporate

08/03 (cont.)

Comment No. 05 **Issue Code: 03**

A PSD New Source Review is triggered if estimated emissions of any of the criteria pollutants exceed 250 tons per year. Key components of the PSD review are a determination of Best Available Control Technology and an analysis of ambient air impacts. If the ambient air impacts exceed the EPA's "significance criteria," then a cumulative air quality analysis is completed to ensure that the PSD Class II incremental increases are not exceeded. However, in no case may the facility's emissions cause an exceedance of the National Ambient Air Quality Standards (NAAQS) established by the Clean Air Act. The analysis for the proposed Facility indicated that the maximum ambient air impact for all pollutants, and applicable averaging periods were less than 4% of the NAAQS. These maximum impacts were on the top of a ridge approximately seven miles west/northwest of the proposed Facility. In Coolidge, as well as at residences within 5 miles of the proposed Facility, the maximum impacts were less than 1% of the NAAQS.

Comment No. 06 **Issue Code: 03**

See response to Comment No. 05 above.

Comment No. 07 **Issue Code: 08**

The new air quality control system was mandated by the Pinal County Air Quality Control District after the DEIS was printed and distributed. The FEIS includes the evaluation of the new system. See the amended air quality analysis in Section 4.2 in the FEIS that incorporates the use of SRC to reduce NO_x emissions by 80%.

Comment No. 08 **Issue Code: 03**

See the amended air quality analysis in Section 4.2 in the FEIS. The NAAQS for the annual PM_{10} concentration is 50 $\mu g/m^3$. The annual average PM_{10} ambient levels in Coolidge have been recorded as 39.6 $\mu g/m^3$ or 79% of the NAAQS. The maximum impact analyzed for the annual PM_{10} from the proposed Facility was 0.93 mg/m^3 or 0.19%

masters, urged on by the bureaucrats who fawn upon them.

Further, the fact that the SCONOX technology, which is also considered BACT by EPA Region 9, is not at all considered or evaluated as an alternative to SCR, belies the deficiencies of this DEIS. SCONOX, if used at Sundance and not the SCR technology that it currently proposes and that is not even explored by the DEIS, would eliminate the ammonia, the ammonium sulfates, the inherent risks of storage and transportation of the ammonia, and would actually control the emissions of criteria air pollutants better than the SCR technology. 09/03

On page 4-10, in the discussion of Hazardous Air Pollutants, the potential ambient air impacts were voluntarily evaluated using the Arizona Ambient Air Quality Guidelines (AAAQG) as a criteria to evaluate potential health risk, with the assertion that if the "predicted concentrations are below the AAAQG, then it can be concluded that no health risks result." The AAAQG, and the methodology used to produce them, have never been peer-reviewed, and represent an entirely unproved standard. Further, neither the AAAQG nor the DEIS in any other way consider or evaluate the synergistic or cumulative effect of these Hazardous Air Pollutants, the criteria pollutants that the Title V major source will emit, or the aforementioned ammonium sulfates. But NEPA ***specifically*** requires an examination of the cumulative effects of a proposed significant federal action, so this DEIS is invalid in these respects, and must be undertaken again with a close eye on the statutory requirements. 10/03 11/25

EMERGENCY AND RISK MANAGEMENT PLANNING ISSUES

As if that wasn't enough, there is the issue of the ammonia stored on-site at the power plant and the additional risks the ammonia presents. It will be common to see 15,000 to 20,000 gallon tanks of ammonia stored at this facility. Anhydrous ammonia is particularly dangerous, but even aqueous ammonia is risky. A catastrophic release of ammonia from a 15,000 to 20,000 gallon tank would be enough to kill and injure people a few miles away, depending on weather conditions. Facilities with this much ammonia on-site have to report and participate in a new federal program required by 112r of the Clean Air Act called the Risk Management Program if the ammonia on-site is 20% or greater concentration. Otherwise, the facility will still have to file Tier Two reports as required by the federal Emergency Planning and Community Right-To- Know Act (EPCRA) and develop a facility emergency plan that includes methods of notifying the public and the response agencies that a release has occurred. For a perspective, there are less than 18,000 RMP facilities in the entire nation reporting to the EPA. 12/15

In the rural areas, such as the Sundance facility site, there will not be sufficient resources to respond quickly enough to prevent deaths and injuries. The responders simply do not have the equipment and infrastructure to handle a large-scale hazmat incident. Pinal County relies on other counties' response for these types of hazmat response. A responsible, legitimate NEPA process would have made contacting the Pinal County Local Emergency Planning Committee (PCLEPC) to gather this information part of its process. In the event of a catastrophic release of ammonia from the Sundance facility or from a transportation incident, people can shelter from the ammonia, but it will infiltrate 13/15

Comment No. 08 (cont.) **Issue Code: 03**

of the NAAQS, a 2.4% increase over the measured background level. When Sundance's maximum impact is added to the background, the total is 40.53 $\mu g/m^3$, or 81% of the NAAQS. The NAAQS were established by the Clean Air Act to protect the public health and welfare with an adequate margin of safety. A level of 80% of the NAAQS provides the protection mandated by the Clean Air Act.

Comment No. 09 **Issue Code: 03**

See response to Comment No. 04 above. The application of SCONOx was evaluated in the Best Available Control Technology of the PSD permit application submitted to the Pinal County Air Quality Control District. SCONOx was rejected for the proposed Facility because it is not technically feasible for simple cycle turbines because their exhaust temperature is higher than the optimal operating temperature range of SCONOx.

Comment No. 10 **Issue Code: 03**

The AAAQGs were developed by the Arizona Department of Health as health-based guidelines for contaminants in air. AAAQGs are residential screening values that are protective of human health including children. The AAAQGs are used as tools to decide which air emissions are at a level that they should be evaluated further. Chemical concentrations in air that exceed AAAQGs may not necessarily represent a health risk, but further modeling or calculation is required to assess whether there is a true threat to human health.

While the AAAQGs are not peer reviewed in the way a scientific paper is, they were derived from occupational exposure limits established or recommended by the U.S. Occupational Safety and Health Administration (OSHA), the National Institute of Occupational Safety and Health (NIOSH), and the National Institute

their homes within a given amount of time and reach harmful or even lethal concentrations before the responders can arrive. When the release occurs, unless a rescuer arrives in a timely manner with his/her own SCBA (self-contained breathing apparatus) and one for each person to be rescued, there will be fatalities and injuries. There are not enough SCBA available to provide this response. That is what planning entities exist to plan for, yet as stated, the DEIS doesn't even investigate or address this. And upon investigation, the only conclusion is that there will be unpreventable deaths and injuries if there is a catastrophic release of ammonia as aforementioned. This is not an "insignificant" impact. The may also be issues of evacuation routes sufficient to allow a timely evacuation. And there will be issues of notification and preparation. 13/15 (cont.) 12/15 (cont.)

Both rural and urban areas will see a heightened risk along the transportation route of the ammonia. A tanker of ammonia could harm people 2-3 miles on either side of the transportation corridor, in the event of an accident that ruptures the tanker. Only one out of four chemical spills are transportation incidents. Far more occur during the off-loading of a chemical at the industrial site. 14/12

Further, the SCR technology requires the gradual release of ammonia into the exhaust of the power plant. Ammonia is the most often spilled or unintentionally released industrial chemical in the United States, and this ammonia is released from facilities that are designed to completely contain the ammonia but nonetheless have accidental releases. The risks of using a system like the SCR technology that allows and depends upon the constant and gradual release of ammonia into the environment must be examined and quantified, with a review of the accident and release records at other facilities that are using the SCR technology. 15/03

None of these issues are examined at all, yet all are federal environmental regulations or directly relevant. This is a glaring error in the DEIS.

There is no examination at all in the DEIS of other control technologies, such as SCONOX. SCONOX does not require the use of ammonia, so no ammonium sulfates are formed, and it actually reduces other pollution, such as VOCs, CO, and SOx. Until the full review and analysis of these and other appropriate control technologies is undertaken, the DEIS is entirely deficient. 16/03

FACILITY DESIGN ALTERNATIVES

Actually, there should be a review of the plan to use natural gas as a fuel and the types of electrical power generating plants that could be used. There is no examination of producing the peaking power that Sundance is planned to do in another way or at another site. For example, there will be plenty of baseload power plants being built that could produce extra power to be used when peaking power is needed. Using excess power generated at baseline plants to convert water into hydrogen and oxygen, then using the hydrogen as a fuel for peaking power, could be an alternative. This alternative would produce no carbon dioxide, no carbon monoxide (CO), virtually no SOx, far less particulates, and far less NOx than the currently proposed facility. There would also be more oxygen in the air as a result. 17/19

Comment No. 10 (cont.) **Issue Code: 03**

for Environmental Health Science (NIESH). The most protective standards or recommended levels from the U.S. and other countries were used. Many of these standards have undergone peer review as well as regulatory and legislative review.

See the amended air quality analysis in Section 4.2 in the FEIS. Hazardous air pollutants were evaluated against the AAAQG and all impacts except the annual averaged formaldehyde are predicted to be less than 1% of the AAAQGs. The annual formaldehyde value was 7% of the AAAQG. The adequacy of standards that have been implemented by Federal, state, and local agencies are beyond the scope of NEPA process.

Comment No. 11 **Issue Code: 25**

The cumulative effects of air pollutants for the entire Phoenix area are discussed in Section 4.2 in the FEIS. The synergistic effects of combinations of chemicals are only beginning to be explored. There are very few human studies on multiple pollutant exposure. Studies to date have shown that there are possible additive or synergistic effects when ozone combines with sulfur dioxide, nitrogen dioxide, carbon monoxide, sulfuric acid, or other particulate aerosols. These synergistic effects can include greater decreases in lung function for some people concurrently exposed to ozone and other pollutants than for either pollutant alone. Exercise, smoking status, and existing pulmonary disease can also result in increased sensitivity to individual pollutants.

Ammonia sulfates were not evaluated in DEIS because the DEIS was issued before the Pinal County Air Quality Control District decided that the proposed Facility should use the SCR method. The FEIS discusses the impacts associated with the use of this air quality control method at the proposed Facility in the amended air quality analysis in Section 4.2 in the FEIS.

METHODOLOGY

There are also some very strange things in the DEIS. For example, on page 2-5, there is this statement: "Under optimal ambient conditions with the air temperature near 20 (degrees) F, Configuration 2 could generate about 647 MW." It is almost absolutely unlikely that this climatic condition will occur in the area of the facility, especially when the average minimum temperatures are reviewed at Table 3-1 on page 3-5. It is more likely that the temperature would be 100 degrees F! And since it is a peaking power plant, the likelihood of this type of cold causing the use of the peaking power plant is nil. This is, however, a classic example of how this DEIS rambles along with disingenuous analysis and circumstance, instead of focusing on reality and the required analysis and examination of alternatives that NEPA requires. 18/03

The discussion on 2-7 regarding the generating facility is outdated and clearly shows that the design of the power plant is different now than what the DEIS states it to be. For example, the 6,500 hours of operation is not at all correct. The facility will get an air permit allowing 8,760 hours of operation. 19/03

WATER ISSUES

The discussion about water use that starts on 2-9 does not fully examine the impacts of where the water will come from. To fully examine this, the actual source of the water (CAP or groundwater) needs to be stated. If the CAP water will come from the Gila River Indian Community or the San Carlos Apache Tribe, then the DEIS must examine the impacts of this on those tribal entities. If it will be from groundwater pumping, then the assertions made in the DEIS are questionable, at a minimum. 20/07

On 4-31, the DEIS states that subsidence from dewatering has occurred within the basin, but that the groundwater pumping that might result from the operations of the proposed Sundance facility is not expected to cause subsidence *in the area*. (Emphasis added.) This is disingenuous. The DEIS provides no substantiation for this conclusion. Besides, if subsidence within the basin is already occurring due to groundwater pumping, it is *obvious* that pumping more groundwater from the same aquifer will result in more subsidence *somewhere* in the basin. The analysis ignores this obvious fact, trying to divert attention to the subsidence impact by making the unsubstantiated and undefended claim that subsidence is not expected to occur in the area, and is therefore deficient in examining the impacts of the proposed groundwater pumping for providing the water needs of the facility. 21/07

The discussion on 4-33 regarding the blended wastewater to make it suitable for irrigation does not discuss or examine the effect this will have in speeding up the salinization of the soils or groundwater. These impacts must be fully examined and quantified. 22/07

NOISE

Comment No. 11 (cont.) **Issue Code: 25**

The ambient air impacts analyzed for Hazardous Air Pollutants (HAPs) were far below the AAAAGs established to protect public health. The combination of miniscule ambient air impacts from the proposed Facility and no other significant sources of HAPs nearby would result in a meaningless analysis.

Comment No. 12 **Issue Code: 15**

The proposed Facility would have the capacity to store up to 30,000 gallons of aqueous ammonia for injection into the SCR air pollution control system. The aqueous ammonia solution, less than 20% ammonia and more than 80% water, would be stored in two 15,000-gallon tanks on the proposed Site. Upon arrival at the Site, ammonia would be pumped into one of the two ammonia storage tanks (see Figure 2-1, Proposed Facility Configuration). A concrete containment area would be constructed around the tanks with a sufficient volume to handle the discharge of one 15,000-gallon tank. After the ammonia hose is connected from the truck to the tank, a second vapor recovery hose would be connected from the top of the tank back to the truck to contain any residual vapors that may be in the ammonia tank. In the unlikely event of spills during the delivery of ammonia or during operations, water hoses would be immediately available to dilute the spilled ammonia within the containment area. Operation of the SCR would not involve any high pressure release of ammonia vapor. The aqueous ammonia would be pumped from the storage tanks to the SCR reactor chamber in liquid form. The ammonia would be heated sufficiently for vaporization, and then injected into the SCR for mixture with the exhaust stream.

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There are discussions about the noise impacts in different parts of the DEIS, and there are contradictions and illogic illustrated in the handling of the noise impacts. The DEIS states that the ambient background noise level at the proposed site is about 40-45 dBA (3.3.1 at 3-9), and that the additional noise from the power plant at start-up and shutdown will be an additional 10 dBA, which puts the noise level up to about 55 dBA. This would bring the noise level up to about the level of noise at a commercial area.

23/04

That noise level certainly would destroy the rural nature and atmosphere of the people living near the Sundance power plant! This is a real quality of life issue. Further, the DEIS states on 4-18 that "Changes in sound levels of +/-10 dBA within a short timespan may be perceived as **dramatic**..." (Emphasis added.) But the DEIS also purports that "Normal operation excludes intermittent activities such as start-up, shut down, and any emergency or upset conditions." This is really disingenuous, and betrays the pro-facility agenda of the DEIS. This is a peaking power plant, so it is designed to start-up and shut down often. To exclude start-up and shut down from "normal operations" is a fundamental, inappropriate, contradiction to logic.

24/04

The real story here is that local area residents, a low-income, ethnic minority community, will get admittedly "dramatic" noise disturbances at least daily, and more likely many times per day, and that makes the additional noise a significant impact. If this were to be a power plant that operated continuously, a baseline power plant, then the human ear could get accustomed to the noise and tune it out, but that is not the case here. The people who live there will get the noise of a suburban setting foisted upon them in a "dramatic" manner, and not the noise level of the rural setting that they currently enjoy. To not characterize this additional noise as a significant impact is unconscionable.

25/04

Desert animals will also be affected by this noise. Predators, which use sound to track their prey, will be unable to hear their prey when the power plant starts up or shuts down and creates a "dramatic" sound event.

26/04

To amplify the discussion on noise issues, the DEIS never looks at the cumulative effect of all of the noise from all the separate units at the Sundance facility. The DEIS looks at the additional noise from the power plant at start-up and shutdown, and claims it will be an additional 10 dBA, which does not examine the cumulative noise from all units starting up, which must be considerably more than just one unit starting up, the same way the noise from one car engine starting up is less than the noise of ten car engines starting up. This is yet another logic flaw in a very flawed document.

27/04

ENDANGERED SPECIES ISSUES

Desert plants and endangered species are also not adequately or even scientifically examined in the DEIS. The DEIS acknowledges that hedgehog cactus is an endangered species and that the hedgehog cactus occurs on the proposed site and along the proposed pipeline route (3-37). Later (4-40), the DEIS has the unfounded audacity to proclaim, "No highly safeguarded cacti were observed in the proposed Project area..." This is another of those contradictions that the DEIS is rife with. This contradiction/misrepresentation is part of a disturbing pattern in this DEIS, which smacks

28/09

Comment No. 13 **Issue Code: 15**

NEPA guidelines do not specifically require an assessment of emergency response capabilities, and the assessment of potential impacts of accidents does not usually take into account any emergency response. The impacts of accidents on the general public are assessed as if no mitigation would occur. It is often assumed that a person with no protection is located in the worst place for 24 hours a day, 365 days a year. Impacts to the general public are usually assessed using maps of entire populations in the area. No evacuations are assumed. Any emergency response plans, or evacuation capabilities are usually discussed in terms of mitigation of the potential impacts of an accident. Since the SCR air quality control method has been designated by the Pinal County Air Quality Control District, an assessment of potential accidents associated with the storage and transportation of ammonia has been included in the FEIS.

The proposed Facility would rely on both onsite fire and local fire protection services. Raw water storage tanks would be the source of water for fire suppression. An emergency diesel-fueled-fire pump would enable pumping of storage water to any potential fires for initial suppression of fire. For large fires, response would be from either the Arizona City Fire District, headquartered south of Casa Grande, approximately 15 miles south of the proposed Facility, and the Apache Junction Fire District, headquartered approximately 20 miles north of the proposed Facility. Municipal fire departments are also in Casa Grande and Florence, both within 10 miles of the proposed Facility. The Gila River Emergency Medical Service responds to hazardous materials spill incidents and emergency medical services. The Casa Grande Regional Medical Center provides 24-hour medical emergency service with a staff of 82 medical people.

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of racketeering and/or fraud.

HAZARDOUS WASTES/ENVIRONMENTAL JUSTICE ISSUES

On 4-23, the DEIS states, "The Project would dispose of hazardous materials at a hazardous waste facility either in Coolidge or another location in Phoenix." This ignores well-known environmental justice issues in that there has been a civil rights/environmental injustice claim filed with USEPA regarding the siting and permitting of the Heritage hazardous waste facility near Coolidge (which is the one the DEIS refers to) as well as a civil rights/environmental injustice claim filed with USEPA regarding the proposed permitting of the Innovative Waste Utilization hazardous waste facility in Phoenix. All of the hazardous waste facilities in Phoenix that accept hazardous wastes generated off-site are in low-income communities of color, which raises civil rights and environmental justice issues. That the DEIS does not investigate these issues puts it on track to violate the federal Civil Rights Act and related laws, and further constitutes a violation of NEPA.

29/14

The impacts from spills of hazardous fluids are not addressed. Instead, the DEIS in essence purports that there won't be any spills, which is an entirely unrealistic and unsubstantiated assurance. There could be a very significant impact to the groundwater from a spill of hazardous fluids, as the groundwater is only 75 feet below the surface. A realistic review of the impacts of a spill of these hazardous fluids must be undertaken to comply with NEPA requirements.

30/05

VISUAL RESOURCES

The discussion of Visual Resources that begins on 4-49 is strange. It does not provide anywhere the basis of its statements and claims. There are no surveys of local people or others to show what people actually think. Among its more glaring deficiencies, it fails to examine or even mention the appearance of the plume of air emissions, including steam, from the facility. The light from the facility at night will be significant, and further destroy the inherent rural desert charm for local residents. The light may also affect the desert animals, many of which are nocturnal.

31/09

32/09

On 4-52, in the discussion regarding the visual impacts to the Casa Grande National Monument, consultations with the Hopi Tribe, Gila River Indian Community, and Ak-Chins are mentioned as ongoing. That would make premature any conclusion that there are no impacts.

33/11

HEALTH IMPACTS FROM PAVING ROADS

Some people are sickened by inhaling asphalt fumes; some are permanently harmed by this. The health impacts on local people by the road paving is not examined.

34/15

SOCIOECONOMICS

Comment No. 14 **Issue Code: 12**
Since the SCR air quality control method has been designated by the Pinal County Air Quality Control District, an assessment of potential accidents associated with the storage and transportation of ammonia has been included in Section 4.2 in the FEIS.

Comment No. 15 **Issue Code: 03**
The use of SCR was not determined until after the issuance of the DEIS. The impacts of the SCR method have been assessed and are included in the FEIS in Section 4.2

Comment No. 16 **Issue Code: 03**
See response to Comment No. 04 above.

Comment No. 17 **Issue Code: 19**
See response to Comment Nos. 03 and 04 above.

Comment No. 18 **Issue Code: 03**
See the amended air quality analysis in Section 4.2 in the FEIS. The referenced discussion indicates that 20 degrees Fahrenheit is the optimal temperature to get the maximum output from the turbines. This temperature is not expected, therefore, the nominal output is 600 megawatts or less at expected temperatures. NEPA documents are expected to discuss the capability of the systems being analyzed.

Comment No. 19 **Issue Code: 03**
The air permit requires a conservative calculation of the potential air pollution of the proposed Facility. Initially the preliminary air permit calculations used the conservative estimate of 8,760 hours. The amended air permit calculation now uses a conservative estimate of 7,500 hours. The proposed Facility would be a peaking power plant. It would not be economical to run all of the time. The 6,500 hours of operation is the expected annual maximum for operation and is the

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The impacts of the short-term migration of workers to the area and their leaving later are not examined. There is also no explanation why local people will not be recruited to work at the facility during any phase of construction or operation.

Impacts to the local communities will be significant. Sundance/PPL (Pennsylvania Power & Light) has already alluded that an out-of-state contractor will be utilized for the construction phase of this project. We are currently witnessing the invasion of out-of-state workers from three power plants currently under construction in Arizona. The Griffin Plant in Kingman, the Reliant plant in Casa Grande and the De-Moss plant in Tucson. These impacts from out-of-state workers have devastating effects on the local communities that are felt for years on the local and state tax bases because of the extra but temporary effects on the local infrastructure, including law enforcement issues. None of this is examined or analyzed in the DEIS.

35/13

The DEIS for this proposed project has been very careful not to mention any negative impacts. In its own words however, it states: " The local economy would be affected by direct project spending and induced economic effects which would occur as a result of employee and business spending income within the area." The impacts of short-term migration of up to three hundred and thirty (330) construction workers to the local area are not examined. However, when out of state contractors are utilized as mentioned above we know that a minimum of 70 to 80% of the workforce will be imported. These workers travel along with these companies from job to job, and state to state. Some will bring their families with them. These workers families move into trailer courts or rent apartments. When their children are placed into community schools burdens are imposed upon these school districts to accommodate for overcrowding of classrooms, without any financial assistance. Since out-of-state workers are not required to pay any property taxes this burden is placed on an already strained school district tax base. It constitutes a disproportionate, adverse impact.

36/13

In 4.11.1 of the DEIS. Sundance/PPL admits on page 4-58 that no agreement has been reached for the treatment of local property taxes. However, it's own (on-going thus far) negotiated tax revenues of $75 million amortized over twenty years are but a fraction of the current liabilities that current business owner must pay. It has already been proven in many communities throughout the country and within our own state that when these out-of-state workers come into our communities that DUI's, crime and drug use instances will increase. Our community's law enforcement agencies will inure added expenses in order to deal with these increases. Again, local & state taxpayers will be asked to pay this unnecessary tax burden imposed upon them.

37/13

Since Sundance/PPL (Pennsylvania Power and light) will be the owner/operator of this facility, it is highly feasible that the eight to twelve permanent employee's will be imported from out-of -state as well. The DEIS did not evaluate these and other potential social impacts at all. Instead it simply reprinted its own vague assurance it may hire locally. The DEIS did incorporate by reference its own induced economic effects but, has been obviously been self-promoting. With this in mind it can be assumed that the developer paid for this document and cannot be expected to be an objective study. The developer's study did not sufficiently analyze the scope of the socio-economic impacts,

38/13

Comment No. 19 **Issue Code: 03**

estimate used for calculating water consumption and other impacts. See the updated air quality analysis in the amended Section 4.2 in the FEIS that reflects the operating conditions listed in the draft air permit issued for public comment.

Comment No. 20 **Issue Code: 07**

The source of CAP water would be a contract for excess CAP water delivery between Sundance and Central Arizona Water Conservation District (CAWCD). The contract has been pre-approved by CAWCD's Board of Directors and was offered to Sundance on January 12, 2001. Its execution is pending completion of a wheeling agreement between Sundance and Hohokam Irrigation District (HID) to transport the water from CAWCD's main canal through Hohokam's existing canals to the proposed Facility. The existing canal adjacent to the proposed Site has significant excess capacity beyond the needs of the proposed Project without upgrade or modification requirements. Wheeling service by HID has been assured by its manager and board members. The wheeling contract is currently in the negotiation and drafting stage, and must be executed before CAWCD will execute the offered CAP Excess Water contract. CAP water for the proposed Project would not come from any Indian communities or tribes.

Sundance is considering, and is in preliminary negotiations concerning the possible provision of CAP water from parties who hold existing long-term, firm subcontracts from CAWCD for substantial amounts of water not currently utilized or anticipated by those parties to be fully utilized during the life of the proposed Project. Subcontractors include several Indian tribes and communities. No such commitment or arrangement has been discussed by Sundance with any Indian CAP allotee.

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therefore, the DEIS be sent back for a more in-depth analysis, one that is not biased, one that is consistent with the statutory requirements of NEPA. 38/13 (cont.)

ENVIRONMENTAL JUSTICE 4.12

The DEIS' section on environmental justice ignores the 200+ Hispanics that live around Eleven Mile Corner. DWA disputes the DEIS assertion that there are "no adverse impacts to human health or the environment." Curiously, the DEIS contradicts itself starting on page 4-63 when it discusses "Unavoidable Adverse Impacts." 39/14

AMERICANS WITH DISABILITIES ACT

The school at Eleven Mile Corner is for disabled children. Because these children are disabled, the Americans with Disabilities Act must be reviewed in this NEPA process in the context of whether the power plant's air emissions, ammonia hazards and risks, noise, and cumulative impacts constitute a disproportionate adverse impact upon these disabled children. 40/24

Sincerely,

Stephen M. Brittle

Stephen M. Brittle
President

ATTACHMENTS

Comment No. 20 (cont.) **Issue Code: 07**

The worst case scenario, a hypothetical assumption that no CAP water being delivered to the proposed Facility, would require complete reliance on existing or new groundwater wells on the proposed Property. This worst case hypothetical scenario has been analyzed by independent professional hydrologists and by the Arizona Department of Water Resources (ADWR.) They have also analyzed the impact of the normal case scenario of projected emergency backup reliance on groundwater during anticipated short-term unplanned and planned outages of the CAP delivery system. See *Memorandum* dated November 30, 2000 and supplemental *Memorandum* dated March 15, 2001, by Greg Wallace, ADWR Chief Hydrologist. ADWR has determined that under either scenario (intermittent backup use of groundwater or full reliance on groundwater for the life of the proposed Facility), the impact on the local groundwater table and groundwater rights and uses by surrounding landowners would be minimal and consistent with the Pinal Active Management Area Management Plans.

Since the proposed Facility would be a simple cycle facility with no cooling towers, there would be no impact to groundwater because of the relatively small water requirement from a very large regional aquifer. ADWR, in its November 30, 2000 Memorandum, notes the dramatic rise in the local water table in recent years as follows: *"Since the mid-1980s, water levels in the area around the proposed plant site have risen by as much as 120 feet."* Groundwater use by the proposed Project, for the worst case hypothetical scenario is anticipated to only slightly decrease the rate of the water table recovery.

Comment No. 21 **Issue Code: 07**

See response to Comment No. 20 above. Regional subsidence is an *historical* phenomenon not common to all lands or soils in the region, but nonetheless extensive in some locations in Pinal County.

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Comment No. 21 (cont.) **Issue Code: 07**
Historically, subsidence has been the result of severe groundwater overdrafting.

However, in the last two decades, there have been dramatic reversals of overdrafting conditions in the region (see ADWR Memorandum cited in Comment No. 20 which confirms a substantial rise in local water tables). As discussed in the DEIS subsidence due to historical groundwater pumping would not be further impacted by the proposed Project. ADWR has confirmed that the minor amount of water required by the proposed Facility, in the context of a rapidly rising water table in a very large aquifer, would have minimal impacts of only a slight decrease in those recovery rates.

The proposed Project plan is to use groundwater for backup only. This would significantly decrease the amount of groundwater use at the Sundance irrigated property compared to historical and recent irrigation pumping of groundwater. Therefore, the proposed Project would decrease any risk of subsidence due to historical groundwater pumping.

Comment No. 22 **Issue Code: 07**
The quality of discharged water would be equal to or better than the quality of the existing groundwater wells located on the proposed Property. Water from these wells historically has been used for irrigation in the area around the proposed Facility. Typical total dissolved solids (TDS) values of this groundwater source have been near 2,700 mg/L. Sundance would mostly use CAP water to operate the proposed Facility. Wastewater from the water treatment facilities on the proposed Site would be blended with the CAP water before any application for irrigation purposes. Water applied for irrigation would have a resultant TDS similar to levels found in the groundwater. Amended Table 4-17 in Section 4.5 of the FEIS shows the comparison of the wastewater before and after blending and the groundwater.

Comment No. 22 (cont.) **Issue Code: 07**

Chloride levels in the blended wastewater would be approximately 300 mg/L. This would be below the current groundwater chloride levels of approximately 735 mg/L that have been applied to crops. The blended wastewater chloride level would be slightly above the Federal Secondary Maximum Contaminant Level of 250 mg/L for drinking water (40 CFR Part 143.3).

The blended wastewater that would be applied to adjacent crops represents a fraction of the irrigation water that would be applied to the crops. Since the TDS and chloride levels would be less than in the groundwater that historically has been applied to these crops, the probability of salinity buildup would be decreased. According to the landowner whose crops would be irrigated with the blended wastewater, a larger portion of the water for irrigation would be supplied by CAP water. Furthermore, flood irrigation would be applied periodically to these crops to leach salts from the soils. The blending procedures and the final water quality required for irrigation purposes would by law be in compliance with the Reclaimed Wastewater Reuse Permit issued and administered by the Arizona Department of Environmental Quality in accordance with the Arizona Administrative Code R18-9-701 through 707.

Comment No. 23 **Issue Code: 04**

Table 3-3 of the DEIS presents typical environmental noise for certain outdoor sound levels. This data do not represent conditions in the vicinity of the proposed Facility. The DEIS states on page 3-9, paragraph one, that the prevailing ambience in the vicinity of the proposed Facility is not 30-35 dBA. The results of a 24-hour noise survey conducted three-fourth mile from the proposed Facility is presented. The study, which was conducted in mid-December, indicated the average noise level is 45.2 dBA for this specific rural area, not the 30 dBA for a typical rural area.

Comment No. 23 (cont.) **Issue Code: 04**

Background noise was measured for a 24-hour noise period on December 14, 2000 near the proposed Site at the Randolph Road/Tweedy Road intersection. The average noise level during the 24-hour period from noon on December 14 to noon on December 15 was 45.2 dBA. The noise during daylight hours was 47.6 dBA, and at night was 41.3 dBA. The average daytime noise was about 45 dBA and the average nighttime noise was about 40 dBA. Had the noise survey been conducted at peak farming season, rather than mid-December, the results of the survey would likely have been higher than the average noise level of 45.2 dBA.

The expected noise level at the nearest residences from the proposed Facility would be 55 dBA, which is an increase of 10 dBA in the noise level from the average of 45.2 dBA. There would be a 14 dBA increase above the nighttime average of 41.3 dBA. This increase over a short period of time would fall between dramatic and striking. The DEIS states that "a qualitative assessment of dramatic and striking changes in sound level could be considered a significant impact." Therefore, for the nine residences that would experience between a 10 to 14 dBA increase in noise level from the startup of the turbines (i.e., those within approximately one mile of the facility), the noise impacts could be considered significant.

An additional consideration is that the turbines and generators would not start up instantly. Noise during a startup sequence would actually be less than during normal operations. The turbines start at low revolutions then speed up. The generators do not operate until the turbines are up to speed. This "spreads" out the startup noise over several minutes. The time period over which shutdown occurs depends on the nature of the shutdown. If all turbines and generators performed an emergency shutdown at the same time the cessation of noise would be dramatic.

Comment No. 23 (cont.) **Issue Code: 04**
Development of some of the nearby parcels of agricultural land into housing subdivisions would have several cumulative noise effects on the surrounding community. There would be more people nearby to experience the noise from the proposed Facility. The development would likely increase both the daytime and nighttime background noise levels whether or not the Facility is built. The increase in background noise would make the noise from the proposed Facility relatively less noticeable.

Comment No. 24 **Issue Code: 04**
The noise from startup and shutdown of the turbines and generators was discussed in Section 4.3 of the DEIS, and is addressed in the response to Comment No. 23 above. The nature of a peaking power plant does include more frequent startup and shutdown sequences than a base load power plant. However, the nature of electrical demand does not cause peaking power plants to startup and shutdown several times in a few hours. The number of turbines and generators that would be operating while the proposed Facility is operational may change fairly frequently; however, once one turbine/generator set is operating and producing noise, the startup or shutdown of other sets is less noticeable.

Comment No. 25 **Issue Code: 04**
See responses to Comment Nos. 23 and 24 above.

Comment No. 26 **Issue Code: 04**
Most predators, herptile, bird or mammal, in the desert hunt by scent and/or sight with some use of hearing. Those animals whose primary hunting technique include their auditory systems include bats and owls. Memphis State University (1971) found that bats are resistant to jamming. They tend to orient themselves so that noise and return signal are received from different angles. No studies were found on the masking properties of background noise on owls hunting ability, but personal observation on a barred owl (*Strix varia*) near an active

Comment No. 26 (cont.) **Issue Code: 04**
oil pumping site, and an eastern screech owl (*Otus asio*) in a suburban setting, found that they were successful for three years in a row in fledging at least two young per year. If background noise, either natural or man-made, adversely affects a predator, it has an equal effect on the prey.

Comment No. 27 **Issue Code: 04**
The DEIS considered the manufacturer's estimated noise effects (63 dBA at 400 feet) for each of the 12 LM6000 turbines. Noise propagation equations were used to predict the noise from each turbine at locations at the proposed Property boundary and beyond. The contribution from each turbine was then logrithmetically added to calculate the total noise at each location at the proposed Property boundary and beyond. Noise during a startup sequence would actually be less than during normal operations. This is because the generators are not yet operating during the startup sequence.

Comment No. 28 **Issue Code: 09**
The hedgehog cactus (*Echniocereus sp.*) referenced on page 3-37 of the DEIS is not the listed subspecies, Arizona hedgehog cactus (*Echinocereus triglochidiatus arizonicus*). The Arizona hedgehog cactus occurs at elevations of 3,700 to 5,000 feet. Elevations in the proposed Project area ranges from 1,415 to 1,437 feet, which makes the occurrence of the listed species unlikely.

Comment No. 29 **Issue Code: 14**
The commentor raises an important issue. Title VI complaints about the subject plants were filed with EPA. As of November 2000 (last update of status page), both of the Title VI complaints to the EPA were "Under Review" for possible investigation. This means that a complaint was received by the EPA, but no decision has yet been made on whether to reject the complaint because they did not meet regulatory requirements, accept the complaint for investigation, or refer the complaint to another Federal agency.

Comment No. 29 (cont) **Issue Code: 14**

The commentor's assertion that "all hazardous waste facilities in Phoenix that accept hazardous waste generated off-site are all in low-income communities of color" is not substantiated by any documentation. Hazardous waste would be disposed of in accordance with all applicable regulations. While the proposed Project has no role in the siting or operating of the hazardous waste management facilities, it would be generating some waste that could be disposed of in the subject facilities. No quantification of the impacts of these facilities on surrounding minority or low-income populations has been made, so no calculation of the increase in impacts due to waste from the proposed Project can be made. However, it is evident that any disproportionate impacts to any minority or low-income populations from those facilities would be connected to a degree to the waste originating at proposed Facility. Thus, the proposed Project would have some disproportionate impact to minority or low-income populations around the subject waste disposal facilities should waste from Sundance be disposed of at either of the subject facilities.

Comment No. 30 **Issue Code: 05**

The DEIS states that spills or leaks of hazardous fluids (e.g., fuel, lubricants, chemicals, etc.) could contaminate the groundwater and affect aquifer use. The extent of the impacts would be minimized by restricting the location of hazardous materials storage, and immediate cleanup of spills and leaks. The procedures used for storage are discussed in the DEIS. In addition, the DEIS discusses the proposed Project's collection of stormwater. See Section 3.5.1.2, page 3-20 of the DEIS.

During exploratory drilling on the proposed Property, a water bearing zone was found at a depth of 270 feet. As part of the design of the proposed Facility, drains would be installed near all equipment with any probability of oil or fuel leaks. All drains would flow to a

Comment No. 30 (cont.) **Issue Code: 05**
water/oil separator in the event of a spill. Concrete containment structures would be constructed at the perimeter of this equipment to handle any sheet flow overflows. Concrete foundations and embankments would be constructed around the ammonia and fuel tanks designed to handle any overflow of the maximum amount of ammonia or fuel stored onsite at any time.

Comment No. 31 **Issue Code: 09**
The assessment of visual resources is subjective. In order to increase the objectivity of these assessments, methods have been developed that include factors that can be measured. These factors include points of view, numbers of people using these points of view, and prevalence of the type of resource in the area. These factors are used to determine existing character of the resource, the potential changes to the resource, and the number of people that would be affected. It is true that someone living in close proximity to the proposed Facility would have his/her view impacted to a greater degree than the general public.

The DEIS readily discloses that the proposed Facility would be apparent to viewers within three miles of the proposed Facility and would change the characteristic landscape around the proposed Facility. While the plume may be visible during cold mornings, the hot and dry climate conditions in Coolidge would lead to rapid evaporation of the plume during most of the year. The proposed Facility would be a simple-cycle generating facility, not a combined-cycle facility with cooling towers, and would not produce a large steam plume.

Comment No. 32 **Issue Code: 09**
Typically, wildlife species will avoid lighted areas unless lights attract a prey. Nocturnal insectivorous birds and bats would be attracted to insects that would be attracted to the lights at the

Comment No. 32 (cont.) **Issue Code: 09**
proposed Facility. This would probably be a significant positive impact. Other less tolerant wildlife would avoid the proposed Project area.

Comment No. 33 **Issue Code: 11**
While consultations were ongoing, preliminary discussions indicated no immediate problems. The results of the consultations to date have been included in the FEIS.

Comment No. 34 **Issue Code: 15**
Asphalt roads have been constructed for many years in the USA. Any short-term inconvenience of smelling asphalt fumes is overridden by the long-term effect of reducing road dust by paving roads. Only a 1.5 mile stretch of road would be paved allowing for a very short construction period over which any asphalt fumes would be present.

Comment No. 35 **Issue Code: 13**
Section 3.11 in the DEIS discusses the labor force in the Region of Influence. The majority of the required labor force would be available in the Phoenix-Mesa area, which includes Pinal County and Coolidge. To the extent that some specialized skill classes are not available in the area, it is assumed that these workers would migrate to the area on a temporary basis during the construction phase. Very few if any out-of-state workers are expected. See response to Comment No. 37.

Comment No. 36 **Issue Code: 13**
The construction of the proposed Project is anticipated to take 12 months. A large part of the workforce is expected to commute from Phoenix either daily or weekly. Very few families are anticipated to move to the Coolidge area. Those few families that might move to the area would contribute the same to the local tax base as current local families that rent housing. See response to Comment No. 37.

Comment No. 37 **Issue Code: 13**

Personal property tax basis is assessed centrally by the Arizona Department of Revenues. As a Class 3 facility, Sundance would be assessed by ADOR in an equivalent manner with any other manufacturing facility in Arizona. The property tax rates are determined by Pinal County and apply to all personal property, with no special tax breaks granted to any individual facility. The current estimate of local taxes that would be paid by the proposed Project is discussed in Section 4.11 in the DEIS. The taxes are estimated to be approximately $2 million per year for this facility. It is difficult to relate taxes to other business liabilities. Due to the nature of tax assessment in Arizona, no negotiations or agreements have been initiated.

As discussed in Section 4.11.1 in the DEIS, the construction workforce is estimated to range between 60 and 330 workers. The DEIS projects that this workforce would come from the Phoenix-Mesa Metropolitan Statistical Area (MSA) which includes Pinal County and Coolidge. No out of state workers are anticipated. Coolidge is within commuting distance of Phoenix and minimal long-term housing of workers is anticipated. The benefit of the revenues to the local economy far exceeds the cost of services provided to a 12 month construction work force and 8 to 12 permanent operators.

Comment No. 38 **Issue Code: 13**

The 8 to 12 permanent full-time staff needed to operate the proposed Facility would include operational and maintenance staff. The required skills are within the capabilities of the Phoenix-Mesa MSA of which Pinal County and Coolidge are part. The impact of this small permanent workforce is not expected to perturb the Coolidge services, school system or tax base. Since the proposed Project is within commuting distance of Phoenix, it is likely that some of the permanent staff may not even reside locally. See response to Comment No. 37.

Comment No. 38 (cont.) **Issue Code: 13**
The DEIS was prepared by a contractor with direction and oversight by Western.

Comment No. 39 **Issue Code: 14**
The Environmental Justice section was prepared in accordance with Department of Energy and Council on Environmental Quality guidelines. These guidelines direct the comparison of minority and low-income populations of the affected area with that of the larger overall region. The demographic composition of the local affected area (Census Tract 12) is comparable to that of the region. There were no disproportionate concentrations of minority or low-income populations evident from the census data. The unavoidable adverse human health impacts identified in the DEIS included air emissions, noise, and visual impacts. These impacts were assessed and would not disproportionately affect minority or low-income populations.

Comment No. 40 **Issue Code: 24**
The American with Disabilities Act would be taken into account during the design and operation phases of the proposed Facility. The requirement to assess disproportionate adverse impacts is a requirement for Environmental Justice. Environmental Justice analyzes impacts to low-income and minority populations.

Don't Waste Arizona, Inc.
Phoenix, AZ
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May 2, 2001

John Holt, Environmental Manager
Western Area Power Administration
Desert Southwest Region
P.O. Box 6457
Phoenix, AZ 85005-6457

Re: Additional Comments on Draft Environmental Impact Statement for Sundance Energy Project DOE/EIS - 0322

Dear Mr. Holt:

Don't Waste Arizona, Inc. (DWA), headquartered at 6205 South 12th Street, Phoenix, AZ 85040, and available by telephone at (602) 268-6110, supplements its first comments dated May 1, 2001, regarding the Draft Environmental Impact Statement for Sundance Energy Project DOE/EIS - 0322 with the following comments:

AIR QUALITY AND VISIBILITY ISSUES

The Clean Air Act requires Reasonable Progess Considerations regarding visibility in Class 1 areas for the future approval of State Implementation Plans (SIPs). The Sundance Energy Project will have, according to its air permit application materials filed with the Pinal County Air Quality Control District, an admitted effect on the Superstition Mountain Wilderness Area, which is a designated Class 1 area. Further, within the lifetime of the proposed Sundance facility, in the year 2008, there must be a Reasonable Progress Consideration for improving the visibility in the Superstition Mountain Wilderness Area that must be promulgated and prepared for the Arizona SIP. The statutory goal of the Reasonable Progress Consideration is to restore visibility in Class 1 areas throughout the United States to what it was before the Industrial Revolution by the year 2064.

There is, however, no mention in the DEIS about this issue, much less and examination of the impacts of the Sundance Energy project's operations and emissions upon this. The effect of the Sundance Energy Project upon the visibility within the Superstition Mountain Wilderness Area, for all years of operation, and the effect of the facility's operations on the attainment of the Reasonable Progess Considerations regarding visibility in Class 1 areas such as the Superstition Mountain Wilderness Area must be analyzed, modeled, quantified, and fully examined for the NEPA process regarding the Sundance Energy Project to be carried out according to federal NEPA statutes.

This examination should also include the impacts associated with noncompliance with the Reasonable Progess Considerations regarding visibility in Class 1 areas and its effect on the approval of the Arizona SIP (disapproval), and the effects and impacts of

01/03

Comment No. 01 **Issue Code: 03**

See the amended air quality analysis in Section 4.2 in the FEIS. Based on the updated emissions with the use of SCR, the proposed Facility would not have any adverse effect on Class I airsheds.

noncompliance in terms of federal sanctions, and those cumulative effects. | 01/03 (cont.)

Sincerely,

Stephen M. Brittle
President